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**EARNINGS MANAGEMENT, CORPORATE GOVERNANCE AND
GOVERNMENT EQUITY OWNERSHIP: EMPIRICAL EVIDENCE FROM
IRAQ**

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UUM
Universiti Utara Malaysia

**MASTER OF SCIENCE (INTERNATIONAL ACCOUNTING)
UNIVERSITI UTARA MALAYSIA
JANUARY, 2018**

**EARNINGS MANAGEMENT, CORPORATE GOVERNANCE AND
GOVERNMENT EQUITY OWNERSHIP: EMPIRICAL EVIDENCE FROM
IRAQ**

**A thesis submitted to College of Business in partial fulfilment of the requirement
for postgraduate Master of Science of International Accounting**

Universiti Utara Malaysia



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Abstract

This study investigates the influence of corporate governance and government equity ownership on earnings management among listed companies in Iraqi Stock Exchange. Specifically, the study examines the audit committee independence, board independence and the existences of government equity participation on earnings management. The study employed data extracted from the annual report of 69 firms having the required data for the period of 2012-2015. The study used Panel Corrected Standard Error regression model to test the association between the variables. The results obtained from the analysis revealed a significant and negative association between government equity ownership, audit committee independence and earnings management. In addition, the results revealed a significant and positive association between board independence and earnings management. To best of the researcher's knowledge, there is little or non-existing literature that examine government equity participation in the Iraqi context. Regulatory authority in Iraq can use the findings of this study to make relevant regulatory pronouncement.

Keywords: earnings management, corporate governance, government equity, Iraq.

Abstrak

Kajian ini menyiasat pengaruh tadbir urus korporat dan pemilikan ekuiti kerajaan terhadap pengurusan pendapatan di kalangan syarikat tersenarai di Bursa Saham Iraq. Secara khusus, kajian ini mengkaji kebebasan jawatankuasa audit, kebebasan lembaga pengarah dan kewujudan penyertaan ekuiti kerajaan ke atas pengurusan pendapatan. Kajian ini menggunakan data yang diekstrak daripada laporan tahunan 69 firma yang mempunyai data yang diperlukan untuk tempoh 2012-2015. Kajian ini menggunakan model regresi Kesalahan Piawai Panel untuk menguji hubungan diantara pembolehubah. Keputusan yang diperoleh daripada analisis menunjukkan hubungan yang negatif antara pemilikan ekuiti kerajaan, kebebasan jawatankuasa audit dan pengurusan pendapatan. Di samping itu, keputusan menunjukkan hubungan positif antara kebebasan lembaga pengarah dan pengurusan pendapatan. Dalam pengetahuan terbaik penyelidik, penyelidikan terhadap penyertaan ekuiti kerajaan dalam konteks Iraq adalah amat terencil atau hampir tiada. Pihak berkuasa di Iraq dapat mengambil pakai penemuan kajian ini untuk melaksanakan peraturan yang bersesuaian.

Kata kunci: pengurusan pendapatan, tadbir urus korporat, ekuiti kerajaan, Iraq.

ACKNOWLEDGMENTS

In the name of Allah, the Most gracious and Most Merciful. All praise is due to Allah (SWT), the creator, the sustainer of this Universe and blessings and salutation be upon prophet Muhammad His Messenger. I am very grateful and feel thankful to Almighty Allah for the blessings, guidance, strength and health that He has given me during this study period that without his Mercy, it would have been impossible for me to complete my thesis as required.

Firstly, I wish to express my sincere gratitude to my supervisor, Dr. Siti Seri Delima Abdul Malak for her support, guidance, time, and spirit. Actually, I obtained valuable knowledge and experience, hardworking with her and I feel honoured and grateful to work under her supervision. I would like to express my sincere gratitude to my beloved family Hassnain my husband, Zahraa and Ali my lovely children, my father and mother that supported me by all kind especially their Du'a during the period of my study.

Secondly, I would like to express my sincere recognition and gratitude to all my dear colleague at Department of Accounting University Utara Malaysia who have contributed and supported me during the period of my study. Finally, I would like to express my sincere recognition and gratitude to all my brothers and sister Ammar, Akeel, Zahraa.

Table of Contents

DECLARATION	iv
PERMISSION TO USE	v
Abstract	vi
Abstrak	vii
ACKNOWLEDGMENTS	viii
Table of Contents	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER ONE: BACKGROUND OF THE STUDY	1
1.1 Introduction	1
1.2 Problem Statement	3
1.3 Research Questions	6
1.4 Research Objectives	6
1.5 Significance of study	7
1.6 Scope of the study	9
1.7 Summary	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Features of governance mechanisms in Iraq	10
2.3 Concept of earnings management and measures	14
2.3.1 Definition of earnings management	14
2.3.2 Measurement of earnings management and their limitations	17
2.4 Corporate governance and earnings management	20
2.4.1 Corporate governance	20
2.4.2 Corporate Governance and Earnings Management	21
2.5 Government equity ownership and earnings management	24
2.6 Summary	26
CHAPTER THREE	27
THEORETICAL FRAMEWORK, DEVELOPMENT OF HYPOTHESES AND RESEARCH METHODOLOGY	27
3.1 Introduction	27
3.2 Theoretical framework	28

3.3 Hypotheses development	29
3.3.1 Earnings management and audit committee independence	29
3.3.2 Earnings management and board independence	31
3.3.3 Earnings management and government equity ownership	33
3.4 Sample selection and data collection procedure	36
3.5 Measurement of variables	37
3.5.1. Measurement of earnings management	37
3.5.2 Measurement of government equity participation	38
3.5.3 Measurement of audit committee independence	39
3.5.4 Measurement of board independence	39
3.5.5 Measurement of control variables	39
3.6 Regression model	40
3.6.1 Research design	40
3.7 Summary of chapter	42
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSIONS	43
4.1 Introduction	43
4.2 Descriptive Statistics	43
4.3 Panel Regression Result	46
4.3.1 FE Model vs RE Model	46
4.3.2 Pooled vs RE/FE	47
4.4 Diagnostic Test Result	48
4.4.1 Heteroscedasticity Result	48
4.4.2 Autocorrelation	49
4.5 Multicollinearity	50
4.6 Person Correlation Analysis	52
4.7 Regression Analysis	55
4.8 Result Discussion	57
4.8.1 Audit committee independence	58
4.8.2 Board independence	58
4.8.3 Government equity ownership	59
4.8.4 Control variables	60
4.9 Summary of the Chapter	60
CHAPTER FIVE	62
SUMMARY, CONCLUSION AND RECOMMENDATIONS	62
5.1 Introduction	62

5.2 Summary of the Study	62
5.3 Implications of the Study	63
5.3.1 Theoretical Implications	64
5.3.2 Practical Implications	65
5.4 Limitations and Future Research	66
References	67



LIST OF TABLES

Table 3.1 Sample Selection.....	37
Table 3.2 Variable description and Measurement.....	41
Table 3.3 Expected association between explanatory variables and earnings management	42
Table 4.1 Table distribution of sample firm by industry.....	44
Table 4.2 Descriptive statistics.....	45
Table 4.3 Earnings management Descriptive Statistics.....	46
Table 4.4 Hausman Specification.....	47
Table 4.5 Langrage Multiplier Test.....	47
Table 4.6 Modified Wald test for Group Wise heteroscedasticity.....	49
Table 4.7 Wooldridge test for autocorrelation in panel data.....	50
Table 4.8 Multicollinearity test.....	52
Table 4.9 Pearson Correlation Matrix.....	53
Table 4.10 Regression result: Earnings management model.....	57
Table 4.11 Summary of Findings.....	60

LIST OF FIGURES

Figure 3.1 Framework of the study.....	29
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LIST OF ABBREVIATIONS

ROSC	Report on the Observance of Standards and Codes
GAAP	Generally Accepted Accounting Principles
CEO	Chief Executive Officer
ROA	Return on Assets
REV	Change in Sales
REC	Change in Receivables
PPE	Property, Plant and Equipment
EM	Earnings Management
ACDIND	Audit Committee Independent
BINT	Board Independent
GOVTSHR	Government Ownership
SIZE	Firm Size
GRTH	Company Growth
LEV	Company Leverage
PCSE	Panel Corrected Standard Error
VIF	Variance Inflation Factor

CHAPTER ONE

BACKGROUND OF THE STUDY

1.1 Introduction

Financial statements remains a major source of communication between equity holders and managers that controls the firm in the modern corporation. Through the financial statements, external stakeholders are able to make informed judgments about the economic performance of the company. Consequently, the quality of earnings as stated in the financial statement takes a central stage in corporate reporting. In this regard, preparers of financial statement are at liberty to exercise discretion in the choice of accounting rules and estimates for the purpose of making the financial statement more informative. While the intent of discretionary use of accounting choice is to make the financial statement informative, the managers may opportunistically exercise the discretion for self-serving interest that does not align with interest of the shareholders(Elliott, & Elliott, 2015). This is because as explained in the agency theory, the financial statement represent a stewardship of account rendered by the managers to shareholders and based on the information therein the shareholders rewards the manager (Jensen &Meckling, 1976; Fama& Jensen, 1983). In many instances, the attachment of managers' compensation with level of earnings encourages managers to manage earnings which may subsequently reduce the quality of reported figures. Reported earnings may be manipulated in order to fraudulently influence the outcome of different contract and achieve some private benefit by managers (Schipper, 1989).

Inherently, earnings management practice arises due to potential divergence of interest between the managers and the owners (Richardson, 2000). The divergence of interest between managers and owners may result in serious agency problem (Jensen & Meckling, 1976). Therefore, in the absence of goal congruence between the managers and the owners several monitoring mechanisms are identified in literatures. For instance, it is widely argued concentrated ownership is an important source in indirectly monitoring managers and hence reduces agency conflict between managers and shareholders (Arosa, Iturralde & Maseda, 2012). The interest of the shareholders and the managers are aligned due to the available measures available at the disposal of institutional investors to discipline managers. As a result, agency problem would be reduced and the interest of the shareholders and managers are aligned. Accordingly, the incentive to engage in earnings management is eliminated and the quality of the financial statement is improved.

However, this ownership concentration may also lead to severe agency problem where the minority shareholders suffer most (Villalonga and Amit, 2006; Wang, 2006). Existing studies on ownership structure of firm and control indicate that firms with significant government control may also have severe agency problem. The agency problem in government owned company is between the outsiders and the insiders (Dyck & Zingales, 2004; Bushman, Piotroski & Smith, 2004; Faccio, 2006; Shleifer & Vishny, 1994; La Porta et al., 1998). The participation of government in the equity of firms according to Guedhami, Pittman, and Saffar (2014) may increase the tension of financial statement distortion. Bushman et al., (2004) noted that direct ownership of firms by government institutions could lead to suppression of financial information in order to hide the

expropriation activities by their political cronies. As a result, the financial statement is manipulated and does not reflect the exact economic state of the firm. Therefore, government concentrated ownership may result in lower quality reporting.

Another potential channel by which agency problem is solved is through corporate governance mechanisms. Corporate governance is a system where companies are being controlled and directed (Cadbury Report, 1992). Audit committee independence, board independence are instituted in order to ensure that appropriate governance are established within the firm. For instance, corporate governance mandates the board of director with duty of overseeing how the management run the business and gives a stewardship of account to the shareholders (Cadbury Report, 1992).

Prior studies (Klein, 2002; Vafeas, 2005; Xie, Davidon, & DaDalt, 2003) established links between various types of corporate governance instruments and earnings quality. An effective independent board and independence of audit committee may likely reduce earnings management and thus improve earnings quality. They help to reconcile the difference between shareholders and the management. The essence of this research is to provide additional insights into of corporate governance mechanism on earnings management in especially in owner stated government ownership in Iraq.

1.2 Problem Statement

Poor market mechanisms, poor board of director performance, poor enforcement mechanisms and compliance, inadequate disclosure, and poor internal controls have all widely been attributed to the major accounting scandals that occur across the globe

(World Bank, 1998). In Iraq, there is heightened tension on the quality of accounting information due to accounting scandals. It was alleged that through creative accounting and fraud, management of some of the listed companies misled their shareholders through the manipulation of their financial figures. These collapse of many high profile corporate bodies such as Basra Bank, Iraqi North Bank and Warka Bank were alleged due to unethical management conducts and exacerbated weak corporate governance practices in Iraq, as well as absence of code of corporate governance in Iraq (Talab, Abdul Manaf, and Abdul Malak, 2017a; Talab, Abdul Manaf, and Abdul Malak, 2017b). Therefore, there is an increase demand for good corporate governance in developing countries most especially Iraq. Subsequent to the invasion of the country by the US Army in the early 2000, the country is in dire need of foreign investors to resuscitate the ailing economy of which earnings quality plays an important role. The management of listed companies has direct effect on the development of robust capital market and good investor protection.

In addition, the trade liberalization policy and technological advancement in the recent time with permission of free flow of capital across countries allows monitoring of firms through effective governance (Lisboa, MenezesFilho and Schor, 2010). According to the report of World Bank on Corporate Governance on the Observance of Standards and Codes (ROSC) an effective corporate governance practice enhances firm performance, enable firm to access cheap external financing and lower the cost of capital.

Several studies have investigated the impact of ownership structure and sound corporate governance practice on earnings quality of listed companies. Majority of these studies

are from the context of countries with developed capital market. Example of such studies are from the US (Ittonen, Tronnes, & Vähämaa, 2016; Badolato, Donelson, & Ege, 2014; González, & García-Meca, 2014; Spinos, 2013; Carcello et al., 2002); from the UK (Crişan & Fülöp, 2014; Conyon 1997; Weir et al., 2002) from Australia (Liu, Harris, & Omar, 2013; Kang, Cheng and Gray, 2007; Tomasic and Fu, 2006; Williamson-Noble & Haynes, 2003). Previous studies that examine the relationship between earnings quality and corporate governance mechanisms in a developing capital market most especially in Iraq are still very little. In addition, majority of existing studies (for example Musa, Kamardin, & Abdul Malak, 2017; Oluku, 2017; El Haddad & Ez-Zarzari, 2017; Outa, Eisenberg, & Ozili, 2017; Wan Mohammad, Wasiuzzaman, & Nik Salleh, 2016; Ramachandran, Ngete, Subramanian, & Sambasivan, 2015; Swastika, 2013; Abed, Al-Attar, & Suwaidan, 2012; Chau & Gray, 2010, Saleh, Iskandar, & Rahmat, 2005; Klein, 2002; Vafeas, 2005; Xie, Davidson & DaDalt, 2003) in this respect have mostly examined earnings quality from corporate governance mechanisms with little effort to examine how state participation in firm equity affects reporting quality. There is also inconsistency in the empirical findings on the associations of corporate governance mechanisms and earnings management (Inaam & Khamoussi, 2016).

Investigating government equity ownership is important since many listed corporate entities on the Iraqi Stock Exchange are government linked. Moreover, the strong presence of government equity participation could negatively affect earnings quality. Bushman et al. (2004) investigated the effect of government ownership on financial reporting transparency and argued that controlling insiders in firms with government

equity participation could exhibit Type Two agency problem as they could extract private benefit from the minority shareholders. Bushman et al. (2004) found the financial transparency for government owned firms was poor. Despite Bushman et al. (2004) argument on the negative implication of government ownership financial transparency, Guedhami, Pittman and Saffar (2014) revealed that politically connected companies are more likely to hire Big-4 audit firms as an indication of their commitment to high quality financial reporting. However, Bebchuk and Fried(2003) reported that in nations where minority shareholders' legal protection is weak, it is very difficult to check the expropriation activities of insiders. Thus, it is very important to explore the issues in Iraq.

1.3 Research Questions

Subsequently, this study develops three research questions:

1. What is the association between audit committee independence and earnings management?
2. What is the association between board independence and earnings management?
3. What is the association between government ownership and earnings management?

1.4 Research Objectives

1. To examine the association between audit committee independence and earnings management.
2. To examine the association between board independence and earnings management.

3. To examine the association between government ownership and earnings management.

1.5 Significance of study

The findings of this study are expected to contribute in several ways. Firstly, Iraq is a developing country that has just emerged from various internal and external crises. The government is embarking on rehabilitation exercise that will seek to stimulate foreign investment into the country. Therefore, the findings of this study will serve as an insight to policy makers on factors that could either have positive or negative consequences on earnings quality. Thus, measures could be taken to improve reporting quality. A significant number of studies had been conducted in Anglo Saxon settings and may not be applicable to Iraqi context. Generalizing inferences from these western studies could be misleading in explaining the discretionary choice or the corporate governance mechanisms that are effective in solving earnings management problems. Secondly, prior studies examine how the monitoring incentive of private institutional investors and concentrated family share ownership affect the discretionary choice of managers. This study extends this line of reasoning by examining how concentrated share ownership by government influences the discretionary reporting choice of managers.

Iraq presents a unique context to investigate the issues concerning earnings quality in government linked companies because of the presence of a substantial number of government owned firms among the listed companies. In addition, despite the substantial number of government owned listed companies, research on government owned equity and earnings management is still very limited in Iraq. Developing and sustaining an

effective corporate governance system is very imperative in developing countries like Iraq where there is weak control for corporate entities (Gibson, 2003; Lemmon & Lins, 2003).

Moreover, by investigating the association between earnings management, government ownership and corporate governance in Iraq, the current study hopes to extend the literature. This is given that the Type 1 agency problem (owner-manager problem) may not be less prevalent in firms with government equity ownership. This is because it is possible in many cases for the government to own a significant share in the company and therefore have a great influence on the management of the company and even have representative on board. The quality of earnings can be negatively affected if there is no presence of strong government equity or government participation and control due to the weakness of governance mechanism.

Consistent with the foregoing argument regarding the significance of earnings management, government equity ownership and corporate governance association in developing countries and the scarce research on it, the findings of this study may lead to some policy implication. The prevalence of concentrated government equity ownership, poor legal environment and absence of code of corporate governance in Iraq may lead to earnings management. Thus, this study aimed to offer new research insight that could trigger policy initiatives that can strengthen earnings quality.

1.6 Scope of the study

The focus of this study is to investigate the effect of government equity ownership, corporate governance mechanisms on earnings management in Iraq. This research is limited to looking into associations between government equity ownership, audit committee independence, board independence and earnings management from 2012 to 2015.

1.7 Summary

The fundamentals of this study are explained in this chapter, and it serves as the introductory chapter. It outlines the reasons and highlights the events that necessitated this study through the significance of the study. This is further extended and specifically addressed as the study's problem statement. The research questions and objectives are also elicited in relationship with each other and the outlined problem statement. In essence, the chapter serves as gateway to this study by briefly introducing each of the components of the chapter. The research methodology to be employed is briefly mentioned by stating how the data shall be collected and analyzed. It also addresses the scopes to be covered by this study and its significances.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study focuses on three aspects comprising earnings management, corporate governance and political influence on corporate reporting. In this chapter, the review of past literature is done upon which the hypotheses and research framework are developed in chapter three. Section 2.2 discusses the features of governance mechanisms in Iraq and section 2.3 discusses the earnings management and the various earnings management measures used in existing literature. Section 2.4 provides a discussion on government equity ownership and how it influences earnings management. Section 2.5 explains the term corporate governance and review previous researches that investigate the relationship between the constructs of corporate governance and earnings management. Finally, the chapter is summarized in Section 2.6.

2.2 Features of governance mechanisms in Iraq

There are no rules and mechanisms in Iraq that are established in the form of a charter or a special code in corporate governance (Talab, Abdul Manaf, and Abdul Malak, 2017a, Talab, Abdul Manaf, and Abdul Malak, 2017b; Talab, 2015; Doski&Shivan, 2015; Mashhadani and Talab, 2013; Talab, 2009; Abdulhakim&Dalloul, 2009). However, this does not mean that they are not practiced. There are a number of laws and regulations in place, especially Iraqi Company Law No. 21 of 1997 and the internal regulations of companies. The laws cover the terms of establishment, management and liquidation, formation of boards of directors and its management.

The Interim Law for Stock Market Number 74 was issued in 2004 to guide the operation of corporation in Iraq. The interim law prohibits for any person or group of people to acquire more than 30% shares in any joint stock market. The essence of the law is to remove unhealthy competition over the control of listed companies. In addition, Section 6, Paragraph 3 of the Interim Law made company's asset disclosure mandatory to the supervisory body. Specifically, Section 6 Paragraph 3 of the Interim Law guides those issues relating to financial statement and quarterly disclosures for the benefit of trading on the stock exchange.

In addition, another relevant law is the Iraqi Banking Law Number 94 in 2004 (part IV) states the responsibilities of the directors regarding business management and development of policies. The law empowers the board of directors to take decisions on management and investment matters of the bank and mandate the board of director to ensure that internal control system has effective functioning. According to Banking Law provisions, the number of directors to be so appointed should be five at least and the appointment is required to be carried during the annual general meeting for a period of four years and their compensation determined thereof (Iraqi Banking Law, 2004).

Article 21 of the Banking Law mandates the disclosure of board of directors' interest in the company. Going further Article 24 makes provision for the establishment and the responsibility of the audit committee. According to Article 24, a minimum number of three directors whose appointment should be ratifying at the annual general meeting are mandated to make up the audit committee. The chairman and the managing director according to the provision of the Article 24 are prohibited from the audit committee

membership. This is thus necessary due to the sensitive nature of the audit committee role, which demands that they should be independent(Iraqi Banking Law, 2004).

In line with Article 44 of the Bank Law, it is required that listed companies should publish their financial statement in two daily widely circulated newspapers. In the audited financial statement, the financial statement of all the company branches should be consolidated and this is according to Article 45 should be filed at the Central Bank of Iraq within 30 days after the financial year-end(Iraqi Banking Law, 2004). In the same vein, the Companies Law No 21/1997 as amended in 2004 makes further clarification on board composition. Article 103 of the law, specifies that the board of director shall comprise a right mixed of indigenous member (Iraqi Companies Law, 2004).

With respect to the meetings of the board of director, it is provided in Article 112 of Company Law No. 21/ 2004 that the board shall meet once every month. The terms and power of the board are discussed under Article 117. This article pointed out that the Board of Directors of administrative, financial, planning, organizational and technical tasks necessary for the functioning company activity except her own terms of reference. Likewise, the board will be responsible for choosing independent auditors, which shall oversee audit Committee. The board shall ensure the maintenance during the year a record of all relevant financial transactions, in line with the generally accepted international standards of accounting for discussion with independent financial auditors.

According to Article 117 of Iraqi Company Law (1997) Amended 2004 the audit committee is in charge of the selection of an independent financial auditor that will be

charged with the duty of ensuring the correctness and dependability of the financial audit and to meet with the auditors to ensure financial reporting integrity and quality. The audit committee ensures that all relevant financial transactions in line with accepted international accounting standards is maintained for discussion with the independent financial auditors.

The 2004 Iraqi Banking Law require that each bank should constitute an audit committee whose function would be to audit and approve the procedures for accounting, plan of annual audit, and the banks' accounting and risk management control. The act empowers the audit committee to recommend and approve the appointment of external auditor. In addition, the audit committee is mandated by the act to review the statutory auditor's report on the financial accounts of the bank and make available the report of any result to the board of directors prior to approval of the financial accounts by the board. The responsibility of the audit committee does not lies with the external auditor alone, the audit committee as well receive report from the chief internal auditor and ensures that the bank comply with relevant laws and regulation guiding its operation. Other functions of audit committee as relates to bank include:

- i. Report of any issue presented to the audit committee by the board of directors.
- ii. Review of the transactions and operations of the bank on the basis of the plan from the request of the board of directors and shareholders who have greater than 10 per cent of the total voting rights as approved by the audit committee.
- iii. Present at least an annual report to the shareholders of the bank in their public meeting on their activities.

2.3 Concept of earnings management and measures

2.3.1 Definition of earnings management

Earnings management is a recurrent issue in accounting as it has grave consequences on capital market performance. Despite the fact that earnings management is a widely research issue, researchers are yet to reach a consensus on what earnings management is all about. Prior studies (Parfet, 2000; Schipper, 1989) have defined earnings management differently depending on the instruments of manipulation, the intent for such manipulation and the timing. One common theme in the different definition of earnings management is the fact that all authors agrees that it is a deliberate action undertaken to falsify financial information with intention to mislead (Powell, Jubb, Lange & Smith, 2005). However, it should be mentioned that not all earnings management are bad. There are earnings manipulation that are done within the provisions of framework for financial reporting. Good earnings management involves reasonable and proper accounting practices which creates value for shareholders (Parfet, 2000). The bad aspect of earnings management however involves the creation of artificial accounting entries and estimating accounting estimates beyond logical limit (Parfet, 2000). The most widely adopted definition of earnings management are the ones given by Schipper (1989) and Healy and Wahlen (1999).

Earnings management, according to Schipper (1989), "is an involvement in the process of preparing financial statement with a view to intentionally gaining personal benefits". As stated by Healy and Wahlen (1999), "when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence

contractual outcomes which depend on reported accounting numbers(Healy & Wahlen1999, p. 368)".

In another vein Healy and Wahlen (1999) and Landsittel (2000) view earnings management as a situation whereby public companies opportunistically manage earnings by deliberately misstating earnings with the intent of meeting a targeted earnings figure or facilitate an earnings growth. Giroux (2004) gave a broader definition of earnings management. His definition suggest that earnings management "entails many accounting decisions ranging from conservative to fraud and submitted that the many accounting judgments provide management incentive to manage earnings". Ronen and Yaari (2008) presented a more informed description of what earnings management by classifying it into white, grey and black. In Ronen and Yaari (2008) assure that earnings management is considered good (white) when it improves financial reporting transparency, grey when such is done within the provision of compliance with bright-lines standard and black when it involves deliberate misrepresentation and fraud. According to the Association of Certified Fraud Examiners, financial fraud is purposeful misrepresentation of information done with the intent of influencing the users of the information to change their decision. In this present study, earnings management is defined as the application of accounting tools in issuing financial reports that show an excessively positive view of the organization's business operations and its financial position. The financial report is meant to check and balance the intentional and fraudulent manipulation of the financial statement of the company.

Literatures identified two categories of earnings management namely; (1) accrual earnings management and (2) real earnings management. The accrual earnings management which is the most cited involves the manipulation of reported earnings by exploiting accounting discretion in line with the provision of Generally Accepted Accounting Principles (GAAP) to distort the exact economic performance of an entity (Dechow & Skinner, 2000). On the other hand, real earnings management entails transaction timing and restructuring of business activities such as investment and operating activities in effort to alter reported figures (Roychowdhury, 2006). The two metrics of earnings management differs in the sense the accrual earnings management involves manipulation through accounting estimates and choice with no consequence on cash flow. However, real earnings management has direct consequence of cash flow since it involves deviation from normal business practice of the business. According to Phillips, Pincus and Rego (2003) and Cohen and Zarowin (2010) real earnings management change firm's operation and is costlier than accrual earnings management. In the view of Roychowdhury (2006) since real earnings management deviate from ordinary practice of business, it constitutes a devastating consequence on the performance of the firm in future.

There are several incentives which motivate the involvement of managers in earnings management as identified in extant studies. DeGeorge, Patel, & Zeckhauser (1999) and Burgstahler and Dichev (1997) identified loss or earnings decrease avoidance as a factor. These motives are associated with income-decreasing earnings management. Another motivating factor is the use of managerial option as part of compensation schemes. This motives encourage managers to manage earnings upward since large earnings increase

their take-home (Bartov&Mohanram, 2004). Healy (1985) reported that management tends to manage earnings upward to maximize the amount of bonus they are going to receive. Therefore, the maximization of bonus drives managers' incentive to manage earnings upward. However, as an extension of Healy (1985) findings, Holthausen et al. (1995) found that when manager bonus is at the peak they tend to manage earnings downward. Other motivating factors for managing earnings upward are hostile takeover, stock for stock (Easterwood, 1997; Erickson and Wang, 1999) and desire to influence market participant decision (Anagnostopoulou and Tsekrekos, 2015).

With respect to income decreasing earnings management, literature documented that firms that experience change in leadership are likely to manage earnings downward because of the need to clear the effect of income-increasing accruals practice by old managers (Almasarwah, 2015). Another reason while income could be managed downward would be to save some earnings for future uses most especially when managers are in doubt of future performance of the company (Nelson et al., 2003).

2.3.2 Measurement of earnings management and their limitations

To detect opportunistic earnings management, several accrual techniques are adopted from the past studies. The techniques and measures have evolved over time starting with the work of Healy (1985). Healy employed total accrual in measuring earnings management. She used the average of total accruals over an estimation period prior to the event period represent non-discretionary accrual. Healy (1985) restrictive assumption that earnings is zero in the estimation period (Kaplan, 1985) and the lack of specific measures used for managing earnings (Xiong 2006) are the major limitation of

the model. Another earnings management model is that of DeAngelo (1986) which tested whether the average value of abnormal accrual is significantly negative for sample of firm in the periods before management buyout. Total accrual in DeAngelo(1986) case consisted of discretionary accrual and non-discretionary accruals. Consequently, discretionary accrual is computed as the difference between total accrual scaled by lagged of total asset in the period of estimation and the estimated non-discretionary accruals. Total accrual is calculated as net income minus operating cash flows after adjusting working capital from operation for change in all current operating accounting. It is assumed under the DeAngelo model that the calculated difference should be zero in the null hypothesis of no earnings management. The limitation of DeAngelo model lies in its notion that non-discretionary remain same over time and therefore changes in total accrual is caused by discretionary accrual (Kaplan 1985). Similarly, DeAngelo model does not indicate whether changes in accrual are caused by firm economic performance or managerial discretion (Kaplan 1985).

The Jones model (1991) revolutionized the earnings management measurement by introducing a regression technique which influences non-discretionary factors affecting accruals. It is assumed by the model that an increase or decrease in revenues and gross property, equipment and plant influence the level of normal accrual associated with firm transaction. The coefficient of the regression represents the estimates of unmanaged accruals. The managed accruals are the regression residuals in the test period. In Jones (1991) approach, non-discretionary accrual is based on changes in revenue and the degree of property, equipment and plant. Total accrual is the book value of total asset. According to Dechow et al. (1995), Jones model assumed that all revenues are non-

discretionary and accordingly, the generated discretionary accruals by the model remain small since the managed earnings is removed from discretionary accrual proxy and included in the non-discretionary accruals. Jones' assumption is that there is no discretion over revenues in neither the estimated period nor event period limits the application of the model.

The next earnings management model is the modified Jones model which assumes that changes in credit sales could as well be result in earnings management. Dechow et al. (1995) modify the Jones model by subtracting the corresponding changes in receivables in the event period. This model controls for economic transaction. Dechow et al. (1995) noted that Jones model overestimates the non-discretionary component and underestimates the discretionary component because all revenues are treated as non-discretionary. Kothari et al., (2005) however argued that modified Jones Model wrongly specify earnings management for organizations that have high financial performance. It was also concentrated that modified Jones model wrongly assumed that all changes in credit sales in the event period are caused by earnings management activities (Young,1999). The modified Jones model discretionary current accruals argues that current discretionary accruals are vulnerable to earnings management as manager have more discretion over current accruals through the choice and application of accounting techniques (Abdulmalik & Ahmad, 2016; Talab, Flayyih, and Ali, 2018).

2.4 Corporate governance and earnings management

2.4.1 Corporate governance

The essence of corporate governance in enforcing sound corporate monitoring in firms have been identified in many literatures, although prior studies are yet to reach consensus on the definition of “corporate governance“. Shleifer and Vishny (1997) gave the definition of corporate governance as “the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment“. Gillan and Starks (1998) view corporate governance is “the system of laws, rules, and factors that control operations at a company“. Corporate governance is set of established mechanisms use in protecting investors from management. John and Senbet (1998) submit that corporate governance is set of mechanisms established in a company to protect shareholders interest. Corporate governance refers to an array of rules establish to enhance the correctness and dependability of financial statement to ensure that the shareholders are well protected (Labelle, Gargouri&Francoeur, 2010). Monks (1994) defines corporate governance from the stakeholders’ perspective when he stated that “corporate governance is the association between the various participants who determine the direction and performance of corporation“. Mitton (2002) defines corporate governance as “a way through which the interest of the minority shareholders are safeguarded from the expropriation activities of the managers and controlling shareholders“.

There are several corporate governance mechanisms that could be employed by companies to prevent the conflict of interest between the shareholders and management. These mechanisms can be divided into internal governance and external governance mechanisms. Several examples of the internal mechanisms include the board of

directors, the equity ownership structure and audit committee of the organization. The external mechanisms refer to external market mechanisms for corporate control and the legal system of the country (Denis & McConnell, 2003). Several studies had been done which examine how the mechanisms impact on firm outcome. Most of the empirical studies on corporate governance are motivated due to economic crises and business failures that happened at different point in time (Cohen, Krishnamoorthy & Wright, 2004). The next sub-section discusses findings of various studies in relation to corporate governance and earnings management.

2.4.2 Corporate Governance and Earnings Management

Many existing literatures on earnings management support the premises that corporate governance mechanism influence earning management from empirical findings (Ittonen, Tronnes, & Vähämaa, 2016; Badolato, Donelson, & Ege, 2014; González, & García-Meca, 2014; Spinos, 2013; Crişan & Fülöp, 2014; Liü, Harris, & Omar, 2013; Kang, Musa, Kamardin, & Abdul Malak, 2017; Oluku, 2017; El Haddad & Ez-Zarzari, 2017; Outa, Eisenberg, & Ozili, 2017; Wan Mohammad, Wasiuzzaman, & Nik Salleh, 2016; Ramachandran, Ngete, Subramanian, & Sambasivan, 2015; Swastika, 2013; Abed, Al-Attar, & Suwaidan, 2012; Bedard, Chtourou, & Courteau, 2004; Chung, Firth, & Kim, 2002; Cornett, Marcus, & Tehranian, 2008; Klein, 2002).

For example Beasley (1996) investigated the effect of corporate governance mechanism on financial reporting quality in US and concluded that firms that have high proportion of outside directors are less likely to witness financial statement fraud. Chia, Lapsley and Lee (2007) and Teitel and Machuga (2010) reported that low earnings quality is

associated with firms with poor management oversight function. They described the quality of firms with high quality earnings has having external auditor that possess quality reputation. These firms will have large audit committee (Baxter and Cotter, 2009) and independent audit committee (Abbott, Parker and Peters, 2004; Chang & Sun, 2009).

Furthermore, firms with high reporting quality are more likely to have audit committee with financial expertise (Bedard et al., 2004; Krishnan, 2005) and would likely have smaller board (Mak and Kusnadi, 2005). With respect to the ratio of independent directors that are outside, the reporting quality of firms improves with the proportion of outside directors sitting on the board (Chau & Gray 2010; Jaggi & Tsui, 2007; Petra, 2007). In addition, Saleh, Iskandar and Rahmat (2005), findings suggested that size of audit committee, frequency of meetings and audit committee knowledge are internal corporate governance characteristics that enhance monitoring mechanisms thus constrain earnings management.

Saleh et al. (2005) who investigated the association between board characteristics and earnings management incentive found that earnings management is negatively related to managerial ownership. Bedard, Chroutou and Courteau (2004) investigated the influence of internal corporate mechanisms on earnings quality. The internal corporate governance mechanisms examined by this study are the independence and activities of audit committee. The study found that audit committee financial expertise and governance expertise as well as the independence of the audit committee improves earnings quality. However, Alfadl and Hamd (2015), Fatalawi, (2011) and Mashhadani and Fatlawi, (2012)

in their study discovered that the right of the shareholders in terms of earnings are more concerned to the internal directors than the external directors in an attempt to improve the professional credentials from the point of experience and capacity to overseeing management decisions. This result revealed a negative association between external directors and earnings management in listed companies in Iraqi Stock Exchange.

In contrast, some studies found that earnings management and corporate governance characteristic does not either improve financial reporting quality or does not has significant association with earnings management. For instance, Abdul Rahman and Haneem Mohamed Ali (2006) investigated the effect of board size, board independence, audit committee and concentrated ownership on earnings management in firms listed on the Main Board of Bursa Malaysia over the period 2002 and 2003. They found that earnings management is positively related to board size consistent with the argument that large board is not efficient in their oversight function. In addition, their findings suggest that there is no significant association between board independence, audit committee independence, concentrated ownership and earnings management.

However, Saleh, Iskandar and Rahmat (2005) reported a non-significant association between the proportion of independent directors and earnings management due to the fact that more independent directors' representation on the board cannot limit the action of the CEO or chairman towards earnings management.

2.5 Government equity ownership and earnings management

Concentrated ownership is the ownership of shares by shareholders usually having at least five percent of the outstanding common shares of a company stock. In most cases, such shares are held by family members, financial institutions like mutual fund or pension companies and at times the government (Leelakasemsant, 2015). Firms with concentrated ownership, the substantial shareholders have the incentive to monitor the management. Thus, due to close monitoring from the substantial shareholders the agency cost will be minimized (Shleifer and Vishny, 1997). On the other hand, concentrated ownership could as well lead to a severe agency problem where the minority shareholders suffer most (Villalonga and Amit, 2006; Wang, 2006). For instance, extant studies on ownership structure of firm and control indicate that firms with significant government control have severe agency problem (Lei, Miller, and Reisel, 2014).

Ownership of Iraqi listed companies is highly concentrated owing to the fact that many listed companies were carved out from the state enterprise and as a result the state retained a large number of shares in the companies. Recent study by Gul (2006) have shown more interest in understanding how political interference in the private sector affect the financial reporting incentive of stakeholders in the sector. Two opposing views have emerged in this regard. First, government interference in the form of substantial equity ownership gives the government controlling power to influence strategic decisions such as appointment of CEO and board member. As a result of such controlling power to take decisions that favors their political aspiration regardless of whether such decision are beneficial to the company (Porta, Lopezde, Silanes, Shleifer, & Vishny, 2002). Sun, Tong and Tong (2002) and Wei and Varela (2003) noted that

companies with substantial government influence lacks the incentive to be innovative and seek for avenue to reduce cost. Guedhami, Pittman and Saffar (2014) also argued that political influence creates financial reporting risk. This is because the controlling insiders who will likely to be the government could siphon government resources and hence alter the financial statement to hide such alteration (Dyck&Zingales, 2004). Such alteration makes the financial statement less informative. The opposing view however holds that companies with government substantial ownership are better managed since they are more exposed to public scrutiny (Ang& Ding, 2006; Ramirez & Tan, 2004). Consequently, effort will be geared towards convincing the stakeholders about their good standing. Therefore, management will avoid issues by subscribing to high quality financial report which will serves as a signal of their commitment to transparency (Guedhami, Pittman &Saffar, 2014).

According to Greco (2012) in a study conducted on European oil industry, there is negative and significant association between government ownership and earnings management. Ding, Zhang and Zhang (2007) investigated the ownership and earnings management of privately- and state-owned Chinese companies in order to establish a link between firm's ownership structure and earnings management practices. The study found that state-owned listed companies have a stronger earning management than their counterparts, the private-owned listed companies which therefore tend to maximize their accounting earning more. In contrast, state-owned shares, legal person shares, government ownership and trading shares have no significant effect on earnings management (Hui&Rui-wen, 2007). In other word, Lassoued et al (2017) through empirical study opined that there is significant association between state owners and

earnings management. Also, according to a study conducted in China, government ownership was found to have positive relationship with earnings management (Guo & Ma).

Several empirical researches suggest that the political economy affects the information content of accounting numbers. The empirical finding of Bushman, Piotroski and Smith (2004) using a cross-country regression showed that financial transparency is lower in countries with high government share ownership. From their findings firms with government share ownership are associated with a lower level of financial transparency. Similarly, Bushman and Piotroski (2006) reported that earnings are less conservative in firm operating in countries with more state involvement in the economy such firms recognize good news earlier and bad news later. On a general note, Rajan and Zingales (2003) argues that firm with strong political connection have the incentive to resist domestic institution reforms that is geared towards improving corporate transparency.

2.6 Summary

This chapter discussed the concept of earnings management, the incentives for managers to manage earnings and the measures of earnings management. Next, the association between government equity ownership and earnings management was discussed. Finally, this chapter conclude with the concept of corporate governance and the association between corporate governance and the association between earnings management.

CHAPTER THREE

THEORETICAL FRAMEWORK, DEVELOPMENT OF HYPOTHESES AND RESEARCH METHODOLOGY

3.1 Introduction

Previous chapter provides a review of empirical literature on earnings management, government ownership and corporate governance. This chapter explains the theoretical framework, develops hypotheses that establish the association between earnings management, government share ownership and corporate governance; and provides the research methodology of the study including the sample selection, measurement of variables, regression models. Section 3.2 describes the theoretical framework of developed in the present study and it gives a graphical explanation of how earnings management relates to government ownership and corporate governance. Section 3.3 provides the theoretical postulation supporting the hypotheses that is consistent with the research question and research objective. In section 3.4 the sample selection and data collection procedures are discussed. Section 3.5 discusses variable measurement specifically how the independent variable was measured which is earnings management and the measures of government share ownership and the corporate governance variables. The control variables used in the current study is explained in section 3.6. The regression model is set out in section 3.7 to investigate the association between the identified set of variables. Section 3.8 summarizes the whole chapter.

3.2 Theoretical framework

The objectives of this study are firstly to examine the association between audit committee independent and earnings management. Secondly to examine the association between board independence and earnings management. Finally, to examine the association between government share ownership and earnings management. Basically, this study examines the association between government equity participation, corporate governance and earnings management. The association between these variables of interest is explained by the agency theory which state the consequence of separation of ownership from control (i.e. agency problem). The agency problem is the problem emanating from the separation of firm management and control from the owners of the company which is called the principal-agent problem (Ross, 1973).

As explained by Ross (1973), this issue arises when there is conflict of interest between the agent and its principal. Therefore, Jensen and Meckling (1976) propose that the agency conflict could be resolve when the interest of both parties are consistent. Hence, corporate governance mechanisms such as board independence and audit committee independent are proposed in corporate governance codes to resolve the agency conflict between the owners and managers in the company (Beasley, 1996; Fama and Jensen, 1983). Accordingly, strong corporate governance mechanisms may reduce agency problem, reduce information asymmetry resulting from earnings management and thus improve earnings quality. In addition, control variables such as firm growth, leverage and firms size are included in the framework as displayed in Figure 3.1.

Independent variables

Dependent variable

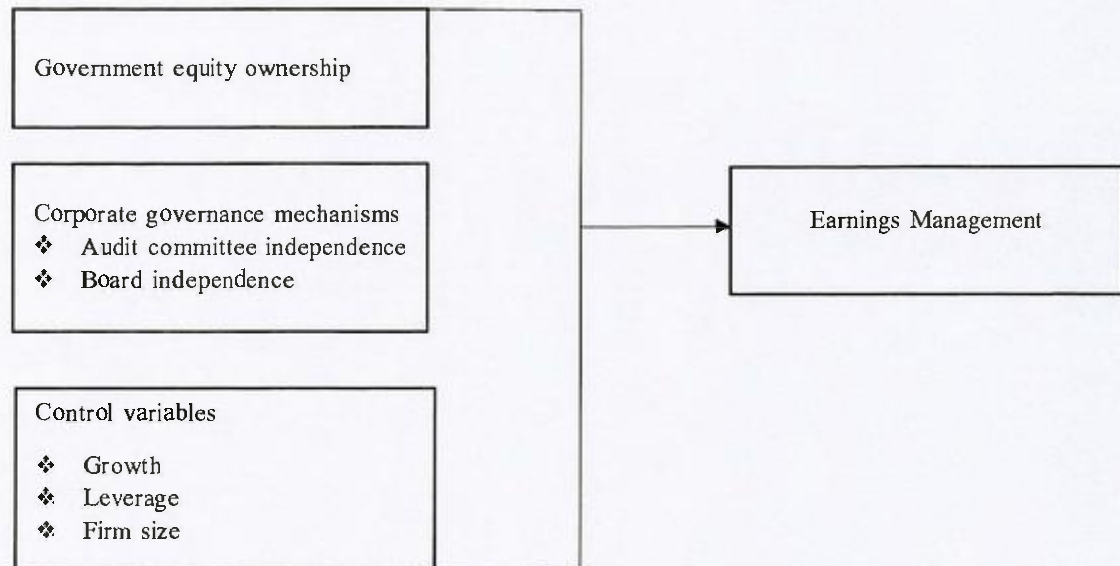


Figure 3.1 Framework of the study

3.3 Hypotheses development

3.3.1 Earnings management and audit committee independence

The information asymmetries and the conflict of interest that exist between the management and the equity holders makes the work of the audit committee to be important ingredient in ensuring the quality of financial statement. However, the independence of the audit committee is very essential in achieving the mandate of the audit committee. The independence of audit committee is one of the important drivers of sound corporate governance. Independent audit committee is said to be objective in the performance of their oversight function over the financial reporting process of their company. Abbott et al. (2004) documented that an independent audit committee performs better because they are free from person or any economic interest from the company that might impair their ability to make objective verification (Carcello& Neal,

2003). Accordingly, an independent audit committee is able and more willing to work without intimidation or management influences (Beasley, Carcello, Hermanson&Lapides, 2000). Another reason why independent audit committee promotes sound corporate governance is their incentive to preserve and develop a good reputation (Abbott et al., 2004). Independent directors are considered to be decision making experts, thus their presence on board is a signal to the investing public and market participant about their sound judgment in decision making (Beasley, 1996). In view of this independent directors are self-conscious of actions that could have a damaging consequences on their reputation.

According to the codes of international best practice Blue Ribbon Committee and Smith Committee, the independence of the audit committee is preserved when the committee is duly composed of independent directors. Both the UK and the US code of corporate governance advocates that the audit committee should be made up of three independent directors. In Iraq, the Iraqi Company Law (2004) and Iraqi Bank Law (2004) require that all listed companies audit committee should comprise of three directors.

The expectation is that an independent audit committee complement the supervisory function of the board by ensuring that sound internal controls are instituted, the independence of the external auditors are protected and as well the whole financial reporting process are safeguarded against fraudulent practice. Empirical studies on audit committee independence highlighted the significant of an independent audit committee in ensuring high quality financial report. In the US, Beasley et al. (2000) reported that those audit committees with independent directors are less likely to commit financial

reporting fraud. Klein (2002) as well reported that a negative association between audit committee independence and earnings management. Abbott et al. (2004) documented that audit committee independence prevents financial restatements which arises due to material omission or misstatement in the earlier financial report issued. Similarly, Bedard, Chtourouand and Courteau (2004) findings support the argument that independent directors' presence on audit committee improves the quality of financial statement by lowering the level of earnings management. Hossain & Khan (2006) findings late supported Beasley et al (2000) findings that found that audit committee independence prevent financial reporting fraud. In 2006 using a combined data set of Malaysia and Indonesia listed company, Bradbury et al. (2006) found that when the whole of audit committee members comprises of independent directors, it reduces the level of income increasing abnormal accruals. It can be argued that audit committee independence enhanced audit committee oversight function accordingly this study hypothesis is that:

Hypothesis1: There is a negative association between earnings management and audit committee independence.

3.3.2 Earnings management and board independence

Fama and Jensen (1983) highlighted the role of board of directors in reconciling the divergent interest of both the principal and the agents. According to them, an effective board will eschew self-serving goals and tend to maximize shareholder's wealth. An example of the characteristic of an effective board is the independence of board members. The independence of the board according to Fama and Jensen (1983) can be

preserved through the nomination of more outside directors. Outside independent directors have more reputation to protect and have more incentive to actively monitor the management (Gupta & Fields, 2009; Jaggi et al., 2009). This argument is in line with the agency theory which states that an independent board will be effective in their monitoring role which will consequently lead to higher earnings quality.

A number of studies established a link between the proportion of independent non-executive director and earnings management. Empirical evidence emerging from these studies are mixed. For instance, Bedard et al., (2004); Cornett et al., (2008); Niu, (2006); Peasnell et al., (2005); Xie et al., (2003) reported that the proportion of outside directors is negatively associated with earnings management suggesting that independent directors enhance board monitoring effectiveness. Furthermore, Petra (2007) documented that the proportion of independent directors improves earnings informativeness. Their study indicates that independent director presence in board room reduce information asymmetry. In another related study, Jaggi, Leung and Gui (2009) found that high number of independent director in board room improves the monitoring effectiveness of the board and hence constrain earnings management and this suggest that firm with high number of independent directors on board experience improvement in earnings quality. The findings of Jaggi, Leung and Gui (2009) support the findings of prior studies (Klein 2002; Niu, 2006). The negative relationship between the proportion of independence director and earnings management is due to the fact board structure is less independent on the CEO which makes it less effective in monitoring the corporate financial accounting process (Klein, 2002). In addition, Niu (2006) stated that proportion of independence director negatively related to earnings management due to the magnitude

of abnormal accruals and the extent of alignment of management compensation with interests of shareholders and the strength of shareholder rights. Contrarily, Gupta and Fields (2009) documented that the presence of outside directors on board does not reduce the incidence of earnings management practice. They based their findings on the ground that in setting where ownership is concentrated and the market mechanisms are not efficient, the existence of outside director will less likely improve corporate governance practice of firms. In another vein, Abdullah and MohdNasir (2004); Abdul Rahman and Mohamed Ali (2008); Park and Shin (2004); Sireger and Utama (2008) and Saleh et al. (2005) in their studies did not established a significant association between board independence and earnings management. According to the above theoretical argument and empirical evidence this study hypothesis is that:

Hypothesis2: There is a negative association between earnings management and board independence.

3.3.3 Earnings management and government equity ownership

Recently, there is a growing interest in accounting and finance literature to gain an understanding on how the political economy affects the incentives of financial reporting stakeholders (Gui, 2006). There are countervailing arguments regarding the financial reporting incentive of firms with government equity participation. Since government has controlling stake in some of the firms, they have influence on the board and on management and take some strategic decision. Accordingly, the first line of argument holds that the motives behind government gaining substantial control through the acquisition of firms' shares is to gain political support of the electorates with a reward of

employment opportunities (Porta, Lopez - de - Silanes, Shleifer&Vishny, 2002). Unlike companies in private hands government owned companies have less incentive to be innovative and reduce cost (Sun, Tong and Tong, 2002; Wei and Varela, 2003).

Moreover, as argued by Guedhami, Pittman and Saffar (2014) political intervention in public listed companies increase financial reporting incentive risk. Because, controlling insiders in connected firm has the incentive to steal corporate resources and manipulate financial statement to hide such manipulation (Dyck&Zingales, 2004). Such manipulation makes the financial statement less informative. On the other hand, the second arguments suggest that the companies are better governed because of the close monitoring and public scrutiny they are subjected to (Ang& Ding, 2006; Ramirez & Tan, 2004). Consequently, the management of these companies tend to maximize the shareholder's value. In addition, Guedhami, Pittman and Saffar (2014) argues that management could decide to desist from self-serving activities and prefer high quality financial reporting as signal of their commitment to transparent reporting. Based on this argument Guedhami, Pittman and Saffar (2014) they found that firms with political connectedness often hired Big4 auditors to show their commitment to high reporting quality. Consistently, Parveen et al. (2016) found a negative association between government ownership and earnings management in banks in Pakistan. While, Rahman, Omar, Rahman&Kazemian(2016) as well reported a negative association between government equity ownership and real earnings management. Also, Guo and Ma (2015) found a positive association between government ownership and earnings management in China.

Several empirical research suggests that the political economy affects the information content of accounting numbers. The empirical finding of Bushman, Piotroski and Smith (2004) using a cross-country regression showed that financial transparency is lower in countries with high government share ownership. From their findings firms with government share ownership are associated with a lower level of financial transparency. Similarly, Bushman and Piotroski (2006) reported that earnings are less conservative in firm operating in countries with more state involvement in the economy such firms recognize good news earlier and bad news later. On a general note, Rajan and Zingales (2003) argues that firm with strong political connection have the incentive to resist domestic institution reforms that is geared towards improving corporate transparency. Guo and Ma (2015) found that government ownership is significantly and positively related to earnings management.

Iraq being a developing country with poor market mechanisms, it could be argued that the political intervention of the government in the economy through share ownership could suppress the information content of the financial statement. However, the government ownership considered the majority owners and they have effective control on the management, then there will be decrease in earnings management when the company have it as supported by the studies of Mashhadani and Fatlawi, (2012); Fatalawi, (2011); Alfadl and Hamd, (2015) which shows negative association between outsider directors, block share, CEO and earnings management in Iraq. Thus, this present study hypothesis that:

Hypothesis3: There is a negative association between earnings management and government equity ownership.

3.4 Sample selection and data collection procedure

The study's population is made up of all companies listed on the Iraqi Stock Exchange during the period 2012 to 2015. The data requirement used in estimating the earnings management model influences the choice of the sample period and sample selection. Only companies that have complete set of data during the study period will be considered. Unfortunately, not all the companies have their annual reports available on the Iraqi Stock Exchange and not all the companies have the full set of information needed for our empirical analysis disclosed. After excluding the companies with incomplete information for our analysis, our final sample consist of 276 firm-year observations over the sample period of 2012, 2013, 2014 and 2015 respectively, related to 69 companies different firms across 8 different sectors.

As a result of new sector and companies in the sectors that were added in 2015 with no additional companies during the period of 2012 to 2014, this accounted for the occurrence of incomplete data. Similarly, missing annual report occurred in some of the companies from 2012 to 2015 due to war masterminded by ISIS and some data were omitted by the Iraqi stock exchange. Information on sample characteristics and sector composition is presented in Table 3.1 below

Table 3.1 Sample Selection

	2012	2013	2014	2015
Total listed companies	85	83	83	98
Incomplete data	0	0	0	17
Missing annual report	16	16	14	12
Total companies selected	69	69	69	69

3.5 Measurement of variables

3.5.1. Measurement of earnings management

The accounting system is based on accrual basis rather than on cash basis. Therefore, the existence of accruals arises as it provides the management with the opportunity to manipulate accounting figures. Accruals can be divided into two components namely; (1) discretionary accrual (2) Non-discretionary. Discretionary accruals are used by manager to either smooth earnings or distort earnings and are at the discretion of the management. Non-discretionary accruals however are consistent with norms and specific nature of the industry that the firm operate. Therefore, non-discretionary accruals are usually unavoidable because they relate to the inherent nature of the company.

Consistent with previous studies this study use ROA in the estimation of discretionary accrual as developed by Kothari et al. (2005) and the cross-sectional Modified Jones discretionary accrual model. In calculating discretionary accrual, total current accruals are first calculated. Although, many proxies of earnings management have been

developed with their pros and cons in estimating earnings management however this study choose the Modified Jones discretionary accrual model because prior studies (Kothari et al. 2005) suggest the estimation approach is better than other measures of discretionary accruals. Total accrual is defined the difference between reported income and operating cash flow with depreciation added back as presented in equation 1.

$$\frac{TA}{Asset_{t-1}} = \partial_1 \frac{1}{Asset_{t-1}} + \partial_2 \frac{\Delta REV - \Delta REC}{Asset_{t-1}} + \partial_3 \frac{PPE}{Assets_{t-1}} + \partial ROA_{t-1} + \varepsilon_{it} \dots \dots \dots \text{equation 1}$$

Where:

TA= change in non-cash current asset minus change in current liabilities excluding current portion of long-term debt minus depreciation and ammonization scaled by lagged total assets.

ΔREV = change in sales

ΔREC = change in receivables

PPE = net property, plant and equipment scaled by lagged total asset

ROA= lagged return on assets

ε_{it} = error term

The absolute value of the residuals from obtained from equation 1 represent the discretionary portion of the total accrual hence represent the earnings management.

3.5.2 Measurement of government equity participation

Existing studies on the role of state participation have used several characteristics to capture government participation in the political economy. Some of the studies (Faccio,

2006; Gul, 2006) refers to the connectedness of board members to serving or ex government officials. Studies such as Bushman et al. (2004) measures government role in the political economy as dummy variable. Given 1 for the companies have common shares held by the government in listed companies and zero for otherwise. These study adopts the proxy of Bushman et al. (2004) as it better captures the objective of this study.

3.5.3 Measurement of audit committee independence

The study adopts Klein (2002) that use the number of independent directors serving in the audit committee found a significant and negative association between the number of independent director over the total number of directors in the audit committee and earnings management practice.

3.5.4 Measurement of board independence

The Iraqi company's law dictate that the board should be made up the right mix of individuals that will preserve board independence and prevent individuals from dominating decision making on board. It is mandated that all listed companies have at least two outside directors that are independent of the management. This study defines board independence in line with the Iraqi company's laws which refers to the proportion of outside directors who are independent of management and has no business obligation or association that could impair their independence reasoning.

3.5.5 Measurement of control variables

According to Dechow and Dichev (2002) accrual quality is influence by some firm characteristics. Therefore, consistent with prior studies (Dechow&Dichev, 2002; Francis

et al., 2004) that examines the association between corporate governance and earnings management this study introduced control variables like firm growth, leverage and firms size. In line with previous studies findings accrual quality is negatively associated with firm size while it has a positive association with firms' growth and firm leverage. Accordingly, firm size (SIZE) is proxy by log of total asset, Firm growth (GRTH) is proxy by growth in sales. Leverage (LEV) is the ratio of shareholders equity divided by total liabilities.

3.6 Regression model

3.6.1 Research design

Since there are testable hypotheses in this study, the association between variables are tested using multiple regression model. The following multiple regression model is employed to test the three hypotheses developed in this study.

$$EM_{it} = \alpha_{it} + \beta_1 ACIND_{it} + \beta_2 BIND_{it} + \beta_3 GOVTSHR_{it} + \beta_4 SIZE_{it} + \beta_5 GRTH_{it} + \beta_6 LEV_{it} + \varepsilon_{it} \dots \dots \dots \text{equation 2}$$

Where:

α = Intercept term

EM_{it} = the absolute value of accrual earnings management;

$ACIND_{it}$ = Number of independent non-executive directors in audit committee;

$BINT_{it}$ = the proportion of outside director on board;

GOVTSHR_{it}= A dummy variable which is equal to 1 when the company have government ownership and 0 if otherwise;

SIZE_{it}= log of total assets;

GRTH_{it}=Growth in sales.

LEV_{it}= Shareholders fund divided by total liabilities.

Table 3.2 below contains the description of all the variables adopted in this study model in addition to the source of the variable in past literature.

Table 3.2 Variable description and Measurement

Variable	Description	Measurement	Sourced from
Dependent Variable			
EM	Earnings management	the absolute value of accrual earnings management	Kothari et al. (2005); Abdulmalik & Ahmad, (2016)
Independent Variable			
BINT	Board independence	Number of directors of non-executive directors divided by board size.	Fauzi and Locker (2012); Klein, 2012; Haniffa & Hudaib (2006); Ramachandran, Ngete, Subramanian, & Sambasivan (2015)
ACDIND	Audit committee independence	Number of independent non-executive directors in audit committee.	Choi et al. (2007); El Haddad & Ez-Zarzari, 2017
GOVTSHR	Government ownership	A dummy variable which is equal to 1 when the company have government ownership and 0 if otherwise	Talab, (2015), Talab, Abdul Manaf, and Abdul Malak, (2017a); Bushman et al. (2004); Parveen et al. (2016); Rahman, Omar, Rahman & Kazemian (2016)
Control Variable			
SIZE	Company size	Measured by the log of total asset.	Haniffa & Hudaib, (2006); Talab, Abdul Manaf, and Abdul Malak, (2017a);

			Musa, Kamardin, & Abdul Malak, 2017
LEV	Company Leverage	Shareholders fund divided by total liabilities.	Haniffa&Hudaib, (2006); Talab, Abdul Manaf, and Abdul Malak, (2017a); Musa, Kamardin& Abdul Malak (2017)
GRTH	Company growth	$Sales_t - sales_{t-1} / sales_{t-1}$.	Haniffa&Hudaib, (2006); Talab, Abdul Manaf, and Abdul Malak, (2017a)

Table 3.3 Expected association between explanatory variables and earnings management

Explanatory variables	Expected signs	Earnings management
Government equity ownership	-	Reduce in earnings management
Audit committee independence	-	Reduce earnings management
Board independence	-	Reduce earnings management
Firm size	-	Reduce earnings management
Leverage	+	Increase earnings management
Growth	+	Increase earnings management

3.7 Summary of chapter

This chapter discussion starts with development of the theoretical framework which gives a graphical presentation on the association between government equity participation, corporate governance and earnings management as explained in the agency theory. In addition, the chapter discuss the hypotheses predicting the association between the three main variables. The study hypothesized that there is a positive association between earnings management and government equity participation. Next,

the study hypothesized that audit committee independent is negatively associated with earnings management. Finally, the study hypothesized that board independence is negatively associated with earnings management. Next the chapter discussed the research methodology which includes sample selection, measures of variables of interest and control variables and the estimation technique used to test the hypotheses.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter discusses the empirical evidence on the association between corporate governance attributes, ownership structure and earnings management of public listed firms in Iraq. The discussion in this chapter is divided into 9 sections. Section 4.2 and 4.3 focus on the preliminary analysis of data where the data were subjected to descriptive analysis and panel regression result based on sector and variables. Section 4.4 and 4.5 discusses diagnostic test and multi-collinearity respectively in order to verify the underlying assumptions of multiple regressions. Section 4.6 focuses on correlation analysis to have a prior understanding of the behavior of the collected data. The regression analysis result was reported in section 4.7 and this was followed by the result discussion of the hypotheses of the main model in section 4.8 while section 4.9 summarizes the whole chapter.

4.2 Descriptive Statistics

The final sample comprises of 69 firms having the required data for analysis over period of 4 year (2012-2015) resulting into 276 observations (balanced panel). As shown in Table 4.3 below, majority of the sampled companies were from the banking sector (30.43%), followed by firm in the industry sector (21.74%), agriculture (8.7%), investment (8.7%), insurance (7.25%), services (10.14%), tourism and hotels (11.59%) and communication (1.45%).

Table 4.1 Table distribution of sample firm by industry

Distribution of sample firms by industry	Number	Per cent	Cum.
Agricultural	24	8.7	8.7
Bank	84	30.43	39.13
Communication	4	1.45	40.58
Industry	60	21.74	62.32
Insurance	20	7.25	69.57
Investment	24	8.7	78.26
Services	28	10.14	88.41
Tourism & Hotels	32	11.59	100
Total number of observations	276	100	

Table 4.2 gives the descriptive statistics of all the variables used in the study. In sum, the earnings management variables (EM) proxy by absolute value of discretionary accrual has a mean value of 0.52 between the minimum (Min) value of 0.02 and maximum (Max) value of 1.62. Likewise, 38% of the sampled companies have government shareholding (GOVTSHR) with a mean value of 0.38 between the minimum (Min) value of 0.00 and maximum (Max) value of 1.00. In the case of board independence non-executive director (BIND), the sampled companies accounted for 47% with a mean of 47.08 between the minimum (Min) value of 0.00 and maximum (Max) value of 88.89. Similarly, the mean of audit committee independence (ACIND) revealed a value of 0.45% of the sampled companies has audit committee that is independent and the value ranges from 0 to 3. Company leverage (LEV) for all the sampled companies' ranges

between -5.85 to 29.61. For Growth (GRTH) and size (SIZE) their values ranged between -99.96 to 1179.17 and 8.36 to 12.56 respectively.

Table 4.2 Descriptive statistics

Variable	Obs	Std. Dev.	Min	Mean	Max
EM	276	0.42	0.02	0.52	1.62
GOVTSHR	276	0.49	0	0.38	1
BIND	276	16.93	0	47.08	88.89
ACIND	276	0.90	0	0.45	3
LEV	276	3.44	-5.85	1.20	29.61
GRTH	276	119.91	-99.96	25.94	1179.17
SIZE	276	1.09	8.36	10.34	12.56

From the table 4.3 that presents the descriptive analysis of earnings management of the listed companies from 2012 to 2015, it is revealed that year 2012 has the highest mean value of 0.75 between the minimum (Min) value of 0.08 and maximum (Max) value of 1.62 from the 276 observations. This is followed by 2014 with a mean value of 0.47 between the minimum (Min) value of 0.02 and maximum (Max) value of 1.07. The least mean value of 0.42 between the minimum (Min) value of 0.08 and maximum (Max) value of 0.80 is accounted for year 2015 while year 2013 has a mean value of 0.45 between the minimum (Min) value of 0.03 and maximum (Max) value of 0.98. The standard deviations for year 2012, 2013, 2014 and 2015 are 0.54, 0.35, 0.37 and 0.27 respectively.

Table 4.3: Earnings management Descriptive Statistics

EM	Obs	Std. Dev.	Min	Mean	Max
2012	276	0.54	0.08	0.75	1.62
2013	276	0.35	0.03	0.45	0.98
2014	276	0.37	0.02	0.47	1.07
2015	276	0.27	0.08	0.42	0.80

4.3 Panel Regression Result

Three regression estimation procedure namely pooled model, fixed effects and random effect model are estimated under the panel regression. Gujarati (2006) stated that the difference in the three models is explained by the treatment of the presence of the individual effect and its treatment hence the model selection. The heterogeneity among individuals firms was captured by the individual effect. The pooled effect treats all the observations as homogenous, thus ignores the individual effect and makes the assumption that the error term is independently and identically distributed. The individual is time invariant and assumed under the intercept in the FE model. There is an assumption on the other hand by RE model that the intercept and slopes of the regressors are constant across individuals and the individual effect is independent of the regressors.

4.3.1 FE Model vs RE Model

In order to know the appropriate model in making choice between the RE and the FE models, there is need to test for whether the individual effect correlates with the independent variables or not. The difference between fixed effect and random effect

estimates was observed by Hausman's (1978) specification test. Table 4.4 below shows that random effect is more appropriate as the Prob>chi² for earnings management model is more than 0.05.

Table 4.4 Hausman Specification

Hausman test	Earnings management
Prob>chi ²	0.9850

4.3.2 Pooled vs RE/FE

To determine whether either the pool regression model or the FE/RE model is appropriate for estimation purposes is the first decision for panel regression model. This study used F-test for FE and the Lagrange Multiplier Test as introduced by Breusch and Pagan (1980) in order to determine the appropriate model used in choosing between the pool effect model and the RE/FE model. The presence of unobserved effect in the effect models is observed by the Lagrange multiplier. The decision is based on the fact that, the null hypothesis is rejected when the calculated value is greater than the critical value. Nevertheless, the FE/RE model is more appropriate in both cases. The langrage multiplier test result for the model in Table 4.5 is not significant. Therefore, the significant effect from the null hypothesis is rejected across the companies. In conclusion, the pooled OLS model is appropriate.

Table 4.5Langrage Multiplier Test

Breusch and Pagan Lagrangian multiplier	Earnings management
Prob>chi ²	0.2496

4.4 Diagnostic Test Result

In order to verify the underlying assumptions of multiple regressions and to avoid misleading results, a range of diagnostic tests were conducted before each model was tested. The panel data regression methodology is adopted in this study in order to establish the association between the dependent and the independent variables. Due to the nature of the data, a panel data approach was employed and for other reasons like: more degree of freedom and less correlation among variables, more informative data and ability to control the individual heterogeneity (Baltagi, 2005). However, there are few diagnostic tests that need to be conducted to ensure that the model is appropriate and unbiased.

Using the panel estimation approach, and despite the numerous advantages of panel data, to avoid spurious test, some diagnostic test need to be conducted. The next sub-section discusses the two basic tests: heteroscedasticity and autocorrelation.

4.4.1 Heteroscedasticity Result

According to Baltagi (2005), due to the assumption that panel data that the variance of the disturbance terms are homoscedastic and the serial correlation is constant through random individual effects, heterogeneity assumption is considered a vital diagnostic test.

Many approaches are available to be used to determine if a disturbance term is constant overtime. Some of those approaches are: the Breusch-Pagan-Godfrey test, the Glejser test, the Park test, the White general heteroscedasticity test, Spearman's rank correlation test and the Goldfeld-Quandt test. In most cases, the choice of approach is determined by the statistical package employed by the researcher for analysis. The modified Wald test for group-wise heteroscedasticity was used since the study employed Stata statistical software in order to access the presence of heteroscedasticity (Greene, 2003). A corrective action using the White heteroscedasticity corrected standard errors is used in the presence of a heteroscedasticity issue which is also referred to as robust standard error (Gujarati & Porter, 2009; Pong & Whittington, 1994).

A significant prob>chi² at 0.01 level is revealed by the result of the modified Wald test for group-wise heteroscedasticity for the model in Table 4.6. Hence, the presence of heteroscedasticity is indicated.

Table 4.6 Modified Wald test for Group Wise heteroscedasticity

Modified Wald test for Group Wise heteroscedasticity	Earnings management
Prob>chi ²	0.000

4.4.2 Autocorrelation

The next test is the examination of problem of correlation between the disturbance term and the observation in time and space (Gujarati & Porter, 2009). Although there will be consistency in the presence of autocorrelation but inefficient estimates of the regression

coefficients and biased standard error are equally present. The Wooldridge test for autocorrelation is available for detecting autocorrelation. The involvement of this test ascertained the significance of the null hypothesis which shows that no idiosyncratic error of the linear panel data model is present. According to Gujarati and Porter (2009), the presence of autocorrelation is identified by a significant F-value.

To examine the presence of serial correlation, the Wooldridge test for serial correlation using xtserial command was employed. According to the null hypothesis, there is no first order serial correlation. Table 4.7 presents the result of the autocorrelation test indicating a significant probability F test for the model. The variable, earnings management is significant at 0.0025 which means that the null hypothesis of no correlation between error terms is rejected and it suggests the presence of first order autocorrelation in the model.

The problems of heteroscedasticity and autocorrelation as explained above is solved in this study by Panel corrected standard error (PCSE) (Howard, 2001; Johnson, 2004; Hoechle, 2007; Hecht, 2008; Baldwin, Borrelli, & New, 2011; Swamy, 2011; Sun, 2014; Isah, 2016; Nassar, Martinez, and Pineda, 2017).

Table 4.7Wooldridge test for autocorrelation in panel data

Wooldridge test for autocorrelation	Earnings management
Prob>chi ²	0.0025

4.5 Multicollinearity

According to Cheng, Hossain and Law (2001), Multicollinearity is an imperative and basic assumption of multiple regression analysis which opines that collinearity should not exist between two independent variables. The coefficient of estimated regression becomes unreliable and unstable when the multicollinearity is high; this can change or force the sample or model to drastically change due to little occurrence (Hamilton). The entire results of the model tested can be affected due to the problem and this will cause difficulty to estimate the coefficient of the model accurately (Cheng et al., 2001). Therefore, the existence of the multicollinearity must be checked.

Multicollinearity can be tested using two methods: the first is Pearson correlation matrix for the bivariate analysis between independent variables. If the correlation values are more than 0.9, the correlation between independent variables leads to multicollinearity problem (Tabachnick & Fidell, 2007). The second method is Variance Inflation Factor (VIF). The VIF for independent variables shows how the coefficients' variance and standard errors of other variables increase due to the inclusion of the variable (Kennedy, 1992). A variable whose VIF values are greater than 10 is highly correlated according to the rule of thumb (Gujarati & Porter, 2003; Hair et al., 2006). The problem can be solved by dropping one of the collinear variables (Hair et al., 2006; Wooldridge, 2003).

Table 4.8 shows the variance inflation factors (VIF) of variables for model that was examined (i.e. GRTH and ACIND) ranges from 1.02 to 2.25. The VIF values for the model is found to be around 1.02 to 2.25, which are below the threshold value of 10 as

suggested by Gujarati and Porter (2003) and Hair et al. (2006).Therefore, the regression analysis is not likely to be affected by the multicollinearity.

Table 4.8Multicollinearity Test

Variables	VIF	1/VIF
GOVTSHR	1.16	0.863300
BIND	1.19	0.841763
ACIND	2.25	0.443591
LEV	1.05	0.950440
GRTH	1.02	0.982045
SIZE	2.08	0.481843
Mean VIF	1.46	

4.6 Person Correlation Analysis

The research variables included in the earnings management model and their Pearson correlation matrix is presented in Table 4.8 presented below. The bivariate correlation among independent, dependent and control variables is examined by the correlation matrix. Generally, all the variables used in the earnings management model are not highly correlated. Notwithstanding, this multicollinearity is not a serious threat to the multivariate results as the correlation values are below 0.80 threshold (Gujarati, 2009).

The Fearson correlation matrix indicating the extent of correlation between the variables used in the present study is shown in Table 4.9 below. According to the figure displayed

in the table, the correlations among the variables are very low with exception of SIZE and ACIND which revealed a 0.69. Even though at 0.69 the present study does not envisage the problem of multi-collinearity because the correlation values are below the 0.80 threshold set by Gujarati (2006). The correlation result was further confirmed with the Variance Inflation Factor (VIF) as displayed in Table 4.8.

Table 4.9 Pearson Correlation Matrix

	EM	GOVTSHR	BIND	ACIND	LEV	GRTH	SIZE
EM	1						
GOVTSHR	0.09	1					
BIND	-0.019	-0.17***	1				
ACIND	-0.29***	-0.32***	0.34***	1			
LEV	-0.02	-0.14**	0.04	0.12**	1		
GRTH	0.18***	-0.04	0.07	-0.03	0.07	1.00	
SIZE	-0.37***	-0.32***	0.12**	0.69***	0.19***	0.02	1

Table 4.9 above shows positive, weak and significant correlation between dependent variable earnings management (EM) and some of the independent variables. The correlation between company growth and company size with EM is 0.180 and 0.370 respectively. Furthermore, the EM is negatively correlated with board of independent directors, audit committee independence and company leverage with value of -0.019, -0.290 and -0.020 respectively except government shareholdings which is positively correlated with 0.09.

The findings also show a positive significant correlation between board of independent directors, audit committee independence, and firm size with GOVTSHR with a negatively values of -0.170, -0.32, and -0.320 respectively at 1% level of significance. Also, the GOVTSHR reveals a weak negative significant correlation with firm leverage of -0.14 value at 5%. Firm growth is positively correlated with GOVTSHR with correlation value of 0.04.

BIND has a positively correlation with audit committee independence of 0.34 and also a positive but very weak correlation with company leverage of (0.04) value. Company growth is insignificantly and positively correlated with BIND with weak value of 0.07 while firm size is significantly and positively correlated with 0.12. Finally, government shareholder ownership negatively and significantly correlated with BIND by -0.17.

ACIND was found to have a positive and significant correlation with leverage and company size, with the following values 0.12 and 0.69 respectively. Furthermore, it has a very weak negative and insignificant correlation with company growth of -0.03. However, it has a weak negative and positive association with government shareholdings and board of independent directors with value of -0.32 and 0.34 respectively.

LEV has an insignificant and significant correlation with the company growth and company size with 0.070 and 0.190 respectively. Furthermore, it has also been found that there is weak negative and significant correlation between government shareholder ownership and LEV of -0.14. More so, LEV is positively and insignificantly correlated

with board of independent directors with a weak value of 0.040. Meanwhile, the association between LEV and audit committee independence is positive, weak and also significant with correlation value of 0.12.

Nevertheless, the GRTH correlation with company size is weak, positive and insignificant with a correlation value of 0.020. Although, GRTH has a weak and positive correlation with board of independent directors, and leverage, GRTH is not significant with the value 0.070 for both variables. A weak negative and insignificant correlation was found between government shareholder ownership, audit committee independence and GRTH with correlation -0.04 and -0.03 respectively.

SIZE has weak positive and significant correlation with board of independent directors and company leverage with the values of 0.120 and 0.19 respectively. Audit committee independence and company growth are positively correlated and insignificant with SIZE with values, 0.69 and 0.02 respectively. However, SIZE has a weak negative and significant association with board government shareholdings with (-0.32) value.

4.7 Regression Analysis

When reporting regression, there are two approaches that are always employed: the use of R^2 and the statistical significance of the fit of the regression models. An indication of the amount of variation in the dependent variable is provided by the R^2 as explained by the variables of the model. Therefore, R^2 is used often to examine the goodness-of-fit of the model. Hair et al., (2006) and Pallant (2007) stated that the higher the value of the R^2 the greater the fit of the model. The significance of the fit of the regression model is

evaluated using F value. The significance of the fit model using the F-value can be evaluated in two ways: first, by comparing the F-value to the table value; secondly, by using the significant value and comparing the value to the alpha value, which is set at $0.05 < 0.10$ in this study. In order for the model to be supported, the significant value should be less than or equal to 0.10 level of significance (Pallant, 2007). The table below shows the summary of the three-regression techniques used in this study while the researcher chose the most fitted one based on the outcome of the tested results.

In line with the research methodology proposed in chapter 3, the panel data estimation technique was used to estimate the earnings management model. The t-values were corrected for the problems heteroscedasticity and autocorrelation by using panel corrected standard error (PCSE) (Hecht & Haye, 2008; Choi & Coffey, 2011; Bailey & Katz, 2011; Abd Al-Hameed Qudah, 2016; Hossain, 2016; Barua, Khan, & Barua, 2017; Chinelo and Frdrick, 2017). The R^2 for the model is 25 % which suggest that the independent variables explain the variation in the earnings management. Although the value of the R^2 is small, it remains consistent with other previous studies (Choi, Kim, & Zang, 2010) that adopt earnings management model. Based on the regression result in Table 4.9, the coefficient on GOVTSHR revealed a significant negative sign with coefficient of -0.221 and z-value of -2.23. This result suggests that the presence of government shareholding (GOVTSHR) reduced the value of earnings management by 0.026. Hence, GOVTSHR presence improves the quality of financial report.

Interestingly, the coefficient on board independence (BIND) revealed a positive and significant sign at the level of 10%. This implies that the presence of independent

director (proxy by non-executive directors) has a significant effect on earnings management practice of listed companies in Iraq.

The audit committee independence (ACIND) showed a negative and significant coefficient (-0.039) and z values of -2.25. That is, a one percent increase in the audit committee independence will lead to 0.025 decreases in absolute discretionary accrual (EM).

The coefficient on leverage (LEV) is positively insignificant. In the case of company growth (GRTH), the coefficient is positively significant at 1 per cent level 0.001(2.66) suggesting that companies experiencing growth are more likely to engage in earnings management. With respect to company size (SIZE) the coefficient (-0.128) is negatively significant at one percent level of significance (-5.09).

Table 4.10 Regression result: Earnings management model

	Coef.	T	P>t
GOVTSHR	-0.221	-2.23	0.026**
BIND	0.001	1.80	0.073*
ACIND	-0.039	-2.25	0.025**
LEV	0.004	0.83	0.701
GRTH	0.000	2.66	0.008***
SIZE	-0.128	-5.09	0.000***
CONS	1.704	6.98	0.000***
R ²		0.25	
F-value		0.00	
N		276	

Note:*, **, *** indicates significance levels at 10%, 5%, and 1% respectively.

4.8 Result Discussion

This section categorizes the result of the hypothesis in order to make decision based on the hypotheses developed. Table 4.11 presents the regression results used in making judgement of whether the association among independent variables such government shareholder ownership, board of independent directors, audit committee independence and company leverage, firm growth, company size and dependent variable, earnings management is significant or not.

4.8.1 Audit committee independence

The result of the association between audit committee independence (ACIND) and earnings management revealed a negative and significant association at 5 % level of significance with a coefficient value of -0.039. This result suggests that the independence of audit committee members reduces earnings management practice among Iraqi listed companies. The result is consistent with the findings of many previous studies (Peasnell et al. 2005; Bradbury et al. 2006) that documented that audit committee independence prevents financial reporting fraud. Specifically, Klein (2002) reported a negative association between audit committee independence and earnings management. In the findings of Bedard et al. (2004) and Bradbury et al. (2006) it was reported that audit committee independence lowers the level of earnings management. Therefore, the hypothesis is said to be accepted.

Hypothesis1: *There is a negative association between earnings management and audit committee independence*

4.8.2 Board independence

The result revealed a positive and significant association (t value= 1.80; coefficient =0.001) between boards of director independence and earnings management. The findings of this result did not support the hypothesis due to the positive and significant t -values and the direction of the hypothesis. This is as a result of the fact that the true independence of the board directors is not affirmative as majority of the independent directors were once a member on the board of directors designated as non-executive directors (Al-Janadi, Rahman & Omar, 2013; Alghamdi & Ali, 2012; Samaha, Dahawy, Hussainey & Stapleton, 2012). The closeness and intimacy between the management and the independent directors could have affected their autonomy to discharge their duty diligently (Jaggi, Leung & Gul, 2009; Klein, 2012; Niu, 2006). Similarly, as the management has better information and expertise to evaluate whether an economic transaction makes sense or not, it is unclear if independent directors can effectively monitor real earnings management (Chen, Cheng & Wang, 2015).

Hypothesis2: *There is a negative association between earnings management and board independence*

4.8.3 Government equity ownership

The result of the hypotheses test shows that government share ownership (GOVTSHR) is negatively and significantly (t -value = -2.23; Coefficient= -0.026) associated with earnings management. This finding is consistent with the argument of Ang and Ding (2006); Ramirez and Tan (2004) argued that the awareness of closed monitoring and public outcry that will greet the poor performance of government controlled firms will indirectly promote self-accountability. Hence, the value of shareholders are better

maximized by management by desisting from expropriating activities and ensuring high quality financial reporting in order to signal their commitment to transparent reporting. Consistent with this view, Parveen et al. (2016) reported a significant and negative association between government ownership and earnings management in banks operating in Pakistan. A closely similar study Guedhami, Pittman and Saffar (2014) reported that in their sampled firm, politically connected engage the service of Big4 auditors as an indicator of their commitment to sound financial reporting.

Hypothesis3:*There is a negative association between earnings management and government equity ownership*

4.8.4 Control variables

However, all the control variables with the exception of leverage (LEV) are significant. Growth (GRTH) is positively significant at 1% level of significance with a coefficient value of 0.001 while size (SIZE) negatively significant at 1% level of significance with a coefficient value of -0.127. The findings of the control variables are consistent with previous studies (Asthana & Boone, 2012; Choi, Kim & Zang 2010; Dechow & Dichev 2002). The result of size indicate that large firms are less likely to engage in earnings management since they have stable and predictable operation while firm experiencing growth are more likely engage in earnings management.

Table 4.1 Summary of Findings

Independent variables	Predicted Sign	Results	Hypothesis (Accept/Reject)
Audit Committee Independence	-	-	Accept
Board Independence	-	+	Reject
Government Equity Ownership	-	-	Accept

4.9 Summary of the Chapter

This chapter demonstrated the results of the data analysis technique earlier proposed in chapter three. The data were then checked for multicollinearity using Variance Inflated Factor and Pearson Correlation Matrix. However, there is no evidence of high correlation among the exogenous constructs in the model. The descriptive statistical analysis was carried out on the sample of the study and panel regression study was analysed through panel corrected standard error. Pooled effect is compared to the previous effect through Langrage Multiplier test also. Heteroscedasticity and autocorrelation are also applied under diagnostic test result in order to avoid misleading results. An elaborate discussion of the results of this study on its theoretical and practical contributions as well as its implication to research and suggestion for further study are discussed in chapter five.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main findings and purpose of this study are discussed in this chapter followed by some recommendations for the concerned relevant agencies, regulatory bodies and authority parties. In this chapter, the summary of the study is presented, and then the implementation of the study followed. Limitation of the study is stated and suggestions for future research are outlined. Finally, a conclusion is brought to end the study.

5.2 Summary of the Study

The present study was motivated by the heightened tension regarding the poor quality of financial reporting as evidenced by reported scandals and the consequence on capital market across the globe. In Iraq specifically, the motivation arises from the need to revive the Iraqi ailing economy and important role that both sound corporate governance mechanisms and good reporting quality plays in this regarded. Therefore, the motivation led to an academic curiosity to assess the effect of corporate governance, government equity participation on earnings management practice of listed companies in Iraq. This study is consistently analyzed with past related literatures, relevant theory (type 2 Agency Theory) and empirical evidences. An empirical model which consists of three independent variables and three control variables was developed to explain how selected corporate governance variables predict the quality of financial report of listed companies on the Iraqi stock exchange through earnings management.

Consequently, three hypotheses were formulated in the present study. The population of interest for the study was all listed companies on the Iraqi stock exchange between the periods of 2012 to 2015. The final sample consisted of 276 observations for the purpose of data analysis. Data were extracted from the annual reports of all the observations and analyzed using the Panel Corrected Standard Error estimation technique that ensures that the residual of the analyzed data is free from the issues of heteroscedasticity, multicollinearity and autocorrelation.

5.3 Implications of the Study

One of the important contributions of this study is the introduction of Iraqi companies into the field of financial reporting quality. Empirical evidence shows that researches on the effect of corporate governance and government shareholdings on earnings management have not received much attention in Iraq. Thus, this study is an additional literature on earnings management in the Middle East. Therefore, this study includes a variable that reflect corporate ownership and regulatory environment in the Iraqi context.

This study reveals that audit committee independence and government equity ownership is negative. This shows that audit committee independence and government equity ownership are responsible for effective corporate governance in listed companies of Iraqi stock exchange. Their acceptance through the empirical analysis underscores their necessity for policy and decision-makers in the corporate governance to focus more attention on those contexts. Thus, the important role of played by these corporate governance variables in ensuring healthy financial reporting as revealed in this study,

will enhance stakeholders including regulators understanding sound corporate governance in financial reporting process.

In contrast, the relationship between board independence and earnings management is found to be positive and significant due to the fact that in Iraq, the true independence of independent directors is in consonance as majority of the independent directors were once occupied the board of director designated as non-independent executive directors. The independence of their monitoring capability would have worsened the social link between the independent directors and the earnings management (Jaggi, Leung & Gul, 2009; Klein, 2012; Niu, 2006). Therefore, the existence of external director will less likely to improve the corporate governance of firms.

5.3.1 Theoretical Implications

This study clearly investigated the effect of government shareholdings, board of independent directors, audit committee independence, company leverage, firm growth, company size on earnings management in Iraqi listed companies. In doing so, this study added value to the existing literature and provides further evidence on the corporate governance attributes that enhance financial reporting quality among listed firms in Iraq. Agency theory posits that the association between board director independence and agents (managers) may be subject to inefficiencies, due to the divergence of interests, which lead to asymmetric information. In this context, the flow of information is affected which in turn increases the asymmetric information, and thereby reduces earnings management and transparency practices. The board characteristics should be considered seriously as a necessary component of an effective functioning of companies

or firms. This study illustrated that board independence significant and positive in the context of earnings management. This is because Iraqi independent directors lack expertise and skills to understand financial reporting details. However, contrary to the theory, it was found that higher proportion of board independence is linked with higher earnings management when unmanaged earnings are below target earnings (Hashim & Devi, 2008). Also, this research shows that the effective intervening functions of the control variables such as company leverage, company size and growth in the association with earnings management. Finally, audit committee independence and government equity ownership negatively and significant association with earnings management creates increased pool of expertise, increase the range of perspectives of policy makers and be a footprint to the top management in corporate governance and can subsequently reduce earnings management practices.

5.3.2 Practical Implications

The present study has endeavored to offer contribution to both knowledge and practice. The findings of this study have important implication for regulator, Iraqi Stock Exchange, academic and management in the field of corporate governance. The study has implication on corporate governance effectiveness as revealed in the study's findings that government shareholdings, board of independent directors, audit committee independence, company leverage, firm growth and company size have practical effect on financial quality through earnings management in Iraq and as such regulators should promulgate laws that will further enhance corporate governance. The importance of board of director independence and audit committee independence cannot be over emphasized as both influence financial reporting quality. Indeed, the empirical studies

have shown that audit committee independent and government shareholdings are perceived to be useful in improving earnings management. In addition, policy makers should also take that the firm growth and company size are also associated with earnings management practices.

5.4 Limitations and Future Research

While this study has several strong implications, it also has a number of limitations. This study only comprises some selected variables which makes it hard to generalize the results of the study. Therefore, future studies can expand the model to include variables that further explain the concept of corporate governance in Iraq. Similarly, this study only focused on Iraq as an entity in the Middle East. Comparative study among Middle East countries can be conducted to examine the overall financial reporting of the region. The sampled firms for this study were based on listed companies in Iraqi stock exchange. The reason for this is the contribution this sector is making toward economic growth and the GDP of the country and with high number of companies listed on Iraqi stock exchange. Therefore, further research is suggested to examine this issue in non-listed companies by applying different method of data analysis technique. Similarly, another dimension can be used to measure earnings management with different analysis technique. Lastly, further studies can look into other factors that may affect earnings management.

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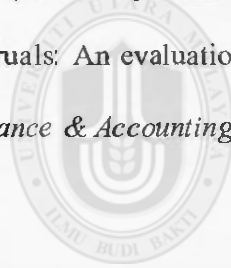
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